

Diagnostic utility of flumazenil in coma with suspected poisoning

SIR,—There have been a number of worrying case reports when flumazenil treatment has been used in mixed poisoning with tricyclic antidepressants.^{1,2} Dr Jonas Höjer and colleagues³ quite correctly state that a normal electrocardiogram recorded before giving flumazenil to an unconscious patient will imply a minimal risk of adverse reactions. The specific criteria used to define normal in this situation must, however, be clarified: a rate less than 100 beats/min, a QRS width less than 0.1 s, and a corrected QT interval less than 0.418 s.⁴

It is also important to point out that only 10% of unconscious patients in the study of Höjer and colleagues had taken a large amount of tricyclic antidepressants. In another study this figure was as high as 48%,⁵ and the risk of adverse reactions may be higher in this group. We therefore suggest that readers consider the local prevalence of overdosage with tricyclic antidepressants before accepting the widespread use of flumazenil in comatose patients.

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We cannot afford an AIDS epidemic

SIR,—I can identify with Dr Steven Dodwell's desperate description of the silent epidemic affecting his central African country.¹ I returned home in January from working in a west African country where it is only a matter of time before the simmering pot boils over into the situation described by Dr Dodwell. At the moment there are fewer people infected with HIV and fewer with AIDS than there are in central Africa, but all the time the virus spreads. Already I have received letters describing increasing numbers of AIDS patients stretching hospital resources, and it can only get worse.

The government of the country that I worked in is more open about the problem than that of Dr Dodwell's country, but the extent of its commitment is questionable. There is a national AIDS programme, which I read about in a medical journal, with screening of blood for transfusion and a system of notification. The number of deaths from AIDS is also supposedly known. Though this is largely true for the teaching hospitals in the south, it is far from so for much of the country. In the hospital in which I worked we had no means of screening blood and yet in the wet, malarial season we were giving transfusions to up to 50 children with life threatening anaemia a day. Additionally there were always obstetric, surgical, and trauma patients in need of blood. I approached international organisations for testing kits and was told that I should wait for the national programme to reach the hospital; it failed to reach us in the two years I was there, and yet we were admitting patients with AIDS to the wards, diagnosed with the few tests we were able to obtain from overseas.

I told the department of health about dying patients and asked about notification but received no reply. Our patients were not included in the national figures and I know of other hospitals for which this was also true. The only communication received from the government during those two years was a circular memorandum forbidding the sending of blood products out of the country. The true extent of the problem is just not known at present, and set in the context of high sexual activity, travelling for work, separated families, poor education, and limited opportunity for health promotion it is difficult to see how it can end other than by the desolation of which Dr Dodwell speaks.

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Aerosols causing ocular trauma

SIR,—In the past three weeks we have seen two patients who had inadvertently sprayed a domestic aerosol (one of deodorant, the other of hair lacquer) into their eye, thinking that it was the aerosol containing the saline solution for their contact lenses. Both of these patients fortunately sustained only corneal abrasions (one 40%, the other 60%), which speedily re-epithelialised after standard treatments.

The inadvertent instillation of noxious substances into the eye because of confusion resulting from a similarity of the container to the dispensing package for ophthalmic preparations has been previously described for superglue.^{1,2} These authors proposed that the plastic dispensing containers for ophthalmic medications should have a distinctively shaped bottle and cap, which would facilitate their discrimination by blind and partially sighted patients (and probably would also help these patients—many of whom are elderly and have arthritic hands—use the containers). Similarly, the "buttons" of the aerosols containing contact lens solutions should have a distinctive shape to aid their discrimination, especially as patients not wearing their contact lenses will be visually impaired.

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50 years on: the crush syndrome

SIR,—Professor E G L Bywaters's fascinating article on his experience of the crush syndrome indirectly suggests that the allies' medical researchers in the first world war lagged behind their German contemporaries.¹ In fact, scientists such as W M Bayliss and N M Keith made observations on the sequelae of muscle ischaemia that are fundamental to our present understanding of shock. Bayliss was already, by 1918, reproducing shock by subjecting cat thighs to repeated trauma and ischaemia,² and Keith was the first to measure blood volume accurately. It was Keith who showed that blood volume became reduced in soldiers with septic shock, demonstrating for the first time the loss of intravascular fluid to the tissues.³

Investigators at this time were also well aware of the problems associated with reperfusion of ischaemic tissue, both locally and systemically. In his authoritative report of medical research in the first world war the American physiologist W B Cannon quoted the "case of a lieutenant caught in a

dugout after a shell burst. His left thigh was compressed between two logs. Thus he remained for twenty-four hours, alert and guiding the efforts of those who were delivering him. His general condition was good, but he was pale, with a pulse small and rapid and a slightly accelerated respiration. There was no wound; the foot, leg and knee, however, were purplish and cold; above the knee there were two deep hollows formed by the pressure of the logs. Some hours after his rescue the officer became restless and, although treatment for shock was undertaken, he died thirty-two hours after the pressure was removed from the leg. There was no indication of nervous depression and no bleeding in this case. The shock appeared on permitting the circulation to return to the damaged tissue."⁴ It was careful clinical observation of cases such as this that led to the widespread successful use of intravenous gum-saline in the resuscitation of battle casualties in the first world war. The medical researchers of the time deserve the credit for this.

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- 3 Keith NM. Blood volume in wound shock. In: Medical Research Committee. *Traumatic toxæmia as a factor in shock. Reports of the Special Investigation Committee on Surgical Shock and Allied Conditions.* London: HMSO, 1919:36-44.
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Trusses

SIR,—The article by Drs E Burns and A Whitley on trusses¹ is a useful addition to the sparse information available on this subject but does not mention the extent of truss usage by patients and doctors. In 1988, before establishing a prospective study to compare truss wearing with herniorrhaphy, I sought information on the sale of trusses by writing to several British truss manufacturers and suppliers. Two responded, E Sallis Ltd of Nottingham and Ellis, Son and Paramore Ltd of Sheffield. From the information supplied an interesting picture emerged. More than 20 000 spring trusses are manufactured annually in the United Kingdom. Comparable figures for elasticated trusses were not available, but the ratio of retail sales of 1.5 spring trusses to each elasticated truss suggests that total annual sales of trusses in the United Kingdom may approach 40 000. This large figure becomes more credible when compared with the results of a census carried out in Sweden in 1972 that showed annual sales of 6000 trusses in a country with a population of approximately 8 million.² From British figures the truss suppliers were able to show that three quarters of sales were direct to retail outlets and only a quarter, or possibly fewer, were distributed through hospitals. In general, suppliers had noted a steady decline in the sales of all forms of truss.

Drs Burns and Whitley recommend surgery for almost all inguinal hernias. Their view is not widely held. A one year audit of emergency hernia repair showed that often general practitioners did not refer patients with a hernia for elective surgery.³ Another study showed this questionable attitude to be a real phenomenon rather than a tired response to stagnant general surgical waiting lists. A group of 406 senior doctors in the West Midlands responded similarly when asked to manage a hypothetical elderly patient suffering with an inguinal hernia. In this instance general practitioners were by no means the worst offenders. The same study reported continuing serious distress after emergency hernia repair, and nation-